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1. (Previously amended): A light ~~tube~~ device for illumination by a power supply circuit comprising:

a bulb portion,

a pair of ~~first~~ end caps ~~cap~~ disposed at opposite ends one end of the bulb portion, and

a plurality of light emitting diodes disposed inside the bulb portion and extending between the opposite ends of the bulb portion, the light emitting diodes in electrical communication with the pair of end caps ~~cap~~ for illuminating in response to electrical current received from the power supply circuit; and wherein the plurality of light emitting diodes is mounted on at least one circuit board.

2. (Previously re-presented): A light tube for illumination by a power supply circuit comprising:

a bulb portion,

a pair of end caps disposed at opposite ends of the bulb portion, wherein each of the pair of end caps is shaped to be coupled with a fluorescent light tube socket, and

a plurality of closely-spaced light emitting diodes disposed inside the bulb portion and extending between the opposite ends of the bulb portion, the light emitting diodes in electrical communication with the pair of end caps for illuminating in response to electrical current received from the power supply circuit.

3. (Previously amended): The light tube of claim 2 wherein each of the pair of end caps is an electrical bi-pin connector.

4. (Currently amended): The light ~~tube~~ device of claim 1, further comprising:

a second end cap disposed at an end of bulb portion opposite the first end cap, the first and second end caps forming a pair of end caps on opposite ends of the bulb portion; and

wherein the bulb portion and the pair of end caps are dimensioned to be mounted in a flourescent light tube socket.

5. (Previously amended): In a replacement light tube for a flourescent light fixture having a light tube socket and a power supply circuit, the improvement comprising:

a plurality of closely-spaced light emitting diodes disposed inside a bulb portion of the light tube and in electrical communication with a pair of end caps coupled to opposed ends of the bulb portion and engageable with the light tube socket, the plurality of light emitting diodes operable to illuminate in response to electrical current delivered by the flourescent light fixture.

6. (Previously amended): The improvement of claim 5 wherein the plurality of light emitting diodes is mounted to a circuit board.

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cat.* 7. (Previously amended): The improvement of claim 6 wherein each of the plurality of light emitting diodes is mounted at an angular off-set from the circuit board to establish a predetermined radiation pattern of light.

8. (Previously canceled).

9. (Currently amended): The light tube device of claim 1 wherein the plurality of light emitting diodes is mounted on only one side of the at least one circuit board ~~to emit light toward only one side of the bulb portion.~~

10. (Currently amended): The light tube device of claim 9 wherein the radiation pattern of light from each of the plurality of light emitting diodes is centered at a 90° angle relative to the at least one circuit board.

11. (Currently amended): The light tube device of claim 1 wherein each of the plurality of light emitting diodes is a white LED.

12. (Currently amended): The light tube device of claim + 4, wherein the plurality of light emitting diodes is displaced substantially continuously between the opposite ends of the bulb portion.

13. (Currently amended): The light tube device of claim 1 wherein each of the plurality of light emitting diodes is arranged into one of a plurality of equidistantly-spaced light emitting diode banks, each of the plurality of light emitting diode banks comprising at least two light emitting diodes.

14. (Previously added): The improvement of claim 5 wherein the bulb portion is annular.

15. (Previously added): The improvement of claim 5 wherein the electric current is a direct current signal, the improvement further comprising:
a rectifier for converting an alternating current signal from the fluorescent light fixture to the direct current signal.

16. (Previously added): The improvement of claim 15, further comprising:
a pulse-width modulating circuit for receiving the direct current signal and supplying a resulting modulated signal to the plurality of light emitting diodes.

17. (Previously added): The improvement of claim 5 wherein each of the plurality of light emitting diodes is a white LED.

18. (Previously added): The improvement of claim 5 wherein each of the

plurality of light emitting diodes is arranged into one of a plurality of equidistantly-spaced light emitting diode banks, each of the plurality of light emitting diode banks comprising at least two light emitting diodes.

19. (Previously added): The improvement of claim 6 wherein the plurality of light emitting diodes is mounted on only one side of the circuit board to emit light toward only one side of the bulb portion.

20. (Previously added): The improvement of claim 19 wherein the radiation pattern of light from each of the plurality of light emitting diodes is centered at a 90° angle relative to the circuit board.

21. (Currently amended): The light tube device of claim 1 wherein the bulb portion comprises one of clear glass and frosted glass.

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cat.* 22. (New): A retrofit LED light tube for replacing a light tube in a fixture, the retrofit LED light tube comprising:

an elongated cylindrical transparent envelope;
a base cap at an end of the envelope, wherein the base cap comprises a first prong and a second prong extending from the base cap, wherein the first and second prongs are adapted to electrically communicate with a fluorescent light socket; and

at least one LED device in electrical communication with the base cap, wherein one terminal of the LED device is in electrical communication with the first prong and a second terminal is in electrical communication with the second prong.

23. (New): The retrofit light tube of claim 22, further comprising:
means for protection against a wherein the LED device comprises a circuit board and a plurality of LEDs serially connected to the circuit board.

24. (New): The retrofit light tube of claim 22, wherein the LED device comprises a circuit board and a plurality of LEDs serially connected to the circuit board.

25. (New): The retrofit light tube of claim 22, further comprising: current-limiting means coupled to the at least one LED device.

26. (New): The retrofit light tube of claim 22 wherein the at least one LED device is electrically connected to a rectifier.

27. (New): The retrofit light tube of claim 22 wherein the base cap has circuitry means for connection with an AC source.
